

TOPEX/POS EIDON GPS Demonstration Experiment Data

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Global Positioning Satellite (GPS) measurements obtained from the on-board TOPEX/POSEIDON demonstration flight receiver and a global network of ground receivers are available from the GPS Data Handling Facility (GDHF) archive. Ground receiver observations are derived from a six station subset of the GPS global tracking network. The six TOPEX ground stations yielded 95% of the expected data during the six month demonstration phase from November, 1992 to April, 1993. For the same period, 98% of the available P-code tracking from the TOPEX flight receiver was obtained. Raw carrier phase and P-code pseudorange measurements are provided for the ground and flight receivers along with an additional file of calibrated and compressed flight receiver data. Daily files for each receiver are stored in RINEX 2 format with sample rates as follows:

TOPEX/POSEIDON

Raw Carrier Phase	1 second
Raw P-code Pseudorange	10 seconds
Edited Carrier Phase	5 minutes
Edited P-code Pseudorange	5 minutes

GROUND STATIONS

Raw Carrier Phase	30 seconds
Raw P-code Pseudorange	30 seconds

During GPS constellation Anti-Spoofing episodes only the L_1 carrier phase and CA-code pseudorange are provided in the raw flight receiver data. For the ground stations, a P-codeless tracking mode exists with full wavelength L_2 , which allows for the production of dual frequency carrier phase and pseudorange observables.

1. 1993 Fall Meeting

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